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HUTS  
c.3



Illinois  
Environmental  
Protection Agency

Division of Public Water Supplies  
2200 Churchill Road  
Springfield, Illinois 62706

32328697

## Groundwater Quality Protection Program

Hutsonville  
FACILITY NUMBER 0330100  
WELL SITE SURVEY REPORT

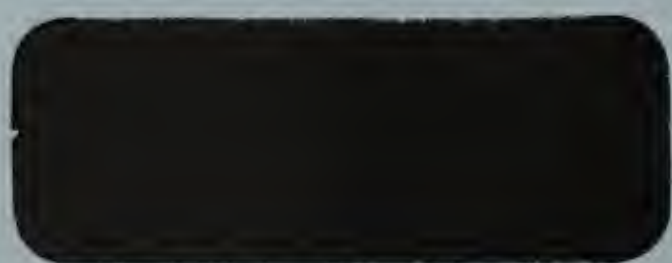
Division of Public Water Supplies



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GROUNDWATER QUALITY PROTECTION PROGRAM:

Hutsonville  
FACILITY NUMBER 0330100  
WELL SITE SURVEY REPORT

Presented by:


Division of Public Water Supplies

Published by:

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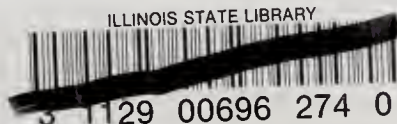
HUTS

C.3

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## INTRODUCTION

This report has been prepared by the Illinois Environmental Protection Agency (Agency) pursuant to Section 17.1 of the Illinois Environmental Protection Act (Act). The report summarizes information about your facility and samples collected and analyzed from your well(s). The well site survey provides an inventory of the area around the well(s) to help increase your awareness of potential hazards to the groundwater utilized by your facility. This information and technical data will assist you in developing and implementing local groundwater protection measures authorized by the Act.

## FACILITY DESCRIPTION AND GEOLOGIC PROFILE OF WELL SITES

Hutsonville has three public water supply wells. The facility produces 73,000 gallons per day to an estimated population of 650. See Table I for a description of each well. The wells utilize a sand and gravel aquifer overlain by alluvium, a mixture of gravel, sand, silt and clay along streams, variable in composition and thickness. Permeability is the ability of a soil or sediment to transmit fluids. A detailed description and geologic profile is found in the Facility wells Report (Appendix C).

TABLE 1

Well I.D.	Setback		Status	Capacity		Specific Treatment	Aquifer	Well Depth (Ft.)	Well Logs Avail.
	Min. (Ft.)	Max. (Ft.)		(gpm) (MGD)	Capacity (gpm/ft)				
well #2 (47810)	400		A	NA	NA	Cl,Fl	Sand & Gravel	37	Yes
well #3 (47811)	400		A	249.8 0.360	NA	Cl,Fl	Sand & Gravel	32	Yes
well #4 (00164)	400		A	329.6 0.475	NA	Cl,Fl	Sand & Gravel	77	Yes

A=Active; I=Inactive; SB=Standby

## GROUNDWATER SAMPLING/MONITORING HISTORY

The public water supply wells no. 2, no. 3, and no. 4 were not sampled as part of the Statewide Groundwater Monitoring Network. Well no.3 was sampled for inorganic chemicals (IOC) to comply with the Safe Drinking Water Act. In the future the wells will be sampled for volatile organic and aromatic chemicals (VOC/VOA) as part of a new amendment to the Act. The IOC analyses performed found the water from the well to meet all general use guidelines. Well no. 2 and no. 4 was not sampled as part of the Statewide Groundwater Monitoring Network. In the future the wells will be sampled for volatile organic and aromatic chemicals (VOC/VOA).



## SURVEY METHODS AND PROCEDURES

The detailed well site survey consists of an aerial photographic map and inventory sheets (Appendix B), that relate information about potential sources, routes and possible problem sites to your water supply well(s). The location of potential sources, routes, possible problem sites, water supply wells, minimum setback zones, and 1,000 foot survey area are all displayed on the aerial photographic map.

The first page of each survey consists of a summary description and geologic profile for each well. The second and following pages of the survey inventory units within and bordering a 1,500 foot radius of the wellhead. A unit is defined as any device, mechanism, equipment, or area (exclusive of land utilized for agricultural production). The Agency five-digit well number is associated with a unit or map code, and then classified. The classification codes relate to definitions of potential contamination sources and routes as defined in the Illinois Groundwater Protection Act (see Groundwater Primer pages 18-19). The distance and direction of the unit from the wellhead is also indicated.

### Survey Results and Findings:

The well site survey of Hutsonville was conducted on July 24, 1991 by Anthony Dulka, Environmental Protection Specialist from the Agency's Springfield Office. The following describes the results and findings for Hutsonville.

#### Hutsonville well #2 (47810)

The survey area is urban consisting partly of commercial businesses and partly of moderate density residential housing. The well is located north of bridge and north of well 3. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (400 feet). Three potential sources or possible problem sites are located within the survey area of the well (1500 feet). These sites are the Village of Hutsonville-STP (map code 1) located 900 feet north of the well, Woolverton Service Station (map code 2) located 600 feet southwest of the well, and Old Ford Garage (map code 3) located 550 feet south of the well.

#### Hutsonville well #3 (47811)

The survey area is urban consisting partly of commercial businesses and partly of moderate density residential housing. The well is located north of bridge and south of well 2. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (400 feet). Three potential sources or possible problem sites are located within the survey area of the well (1500 feet). These sites are the Village of Hutsonville-STP (map code 1) located 1000 feet north of the well, Woolverton Service Station (map code 2) located 600 feet southwest of the well, and Old Ford Garage (map code 3) located 425 feet south of the well.



#### Hutsonville well #4 (00146)

The survey area is urban consisting partly of commercial businesses and partly of moderate density residential housing. The well is located northeast corner of town. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (400 feet). One potential sources or possible problem sites are located within the survey area of the well (1500 feet). This site is the Village of Hutsonville-STP (map code 1) located 975 feet southwest of the well.

#### SUMMARY

The well site survey conducted indicates that there are potential sources/sites that could pose a hazard to groundwater utilized by the Hutsonville public water wells.

- One with below ground fuel storage: Woolverton Service Station.
- Two other sites include: Village of Hutsonville-STP, and an Old Ford Garage.

The Illinois Environmental Protection Act provides minimum protection zones for your wells. These minimum protection zones are regulated by the Agency. The Act also authorizes county and municipal officials the opportunity to provide maximum protection zones up to 1,000 feet. The responsibility for the control would then be assumed by the local officials through adoption of a maximum setback zone ordinance.

Maximum setback zones prohibit the siting of new potential primary sources of groundwater contamination. A maximum setback up to 1,000 feet could expand the regulatory coverage of certain existing and new activities. These controls could be implemented upon the adoption of proposed regulations by the Illinois Pollution Control Board.

#### RECOMMENDATIONS

The Agency strongly urges Hutsonville to consider establishing a maximum setback zone ordinance for its wells. Maximum setback zones prohibit the siting of new potential primary sources of groundwater contamination up to 1000 feet from respective wellheads. To aid you in the development of further regulatory coverage for your well supply, the Agency prepared a "Maximum Setback Zone Workbook" that provides detailed case studies of how to establish maximum setback zones. This text and further technical assistance is readily available form the Agency and the Illinois State Water Survey.

Local governments are also encouraged to consider conducting groundwater protection needs assessments. Any county or municipality having a population less than 25,000 or 5,000 persons respectively, may request the Agency to conduct a hazard review in lieu of a need's assessment. The Agency may issue an "advisory of groundwater contamination hazard" if a significant hazard to the public health or the environment exists.

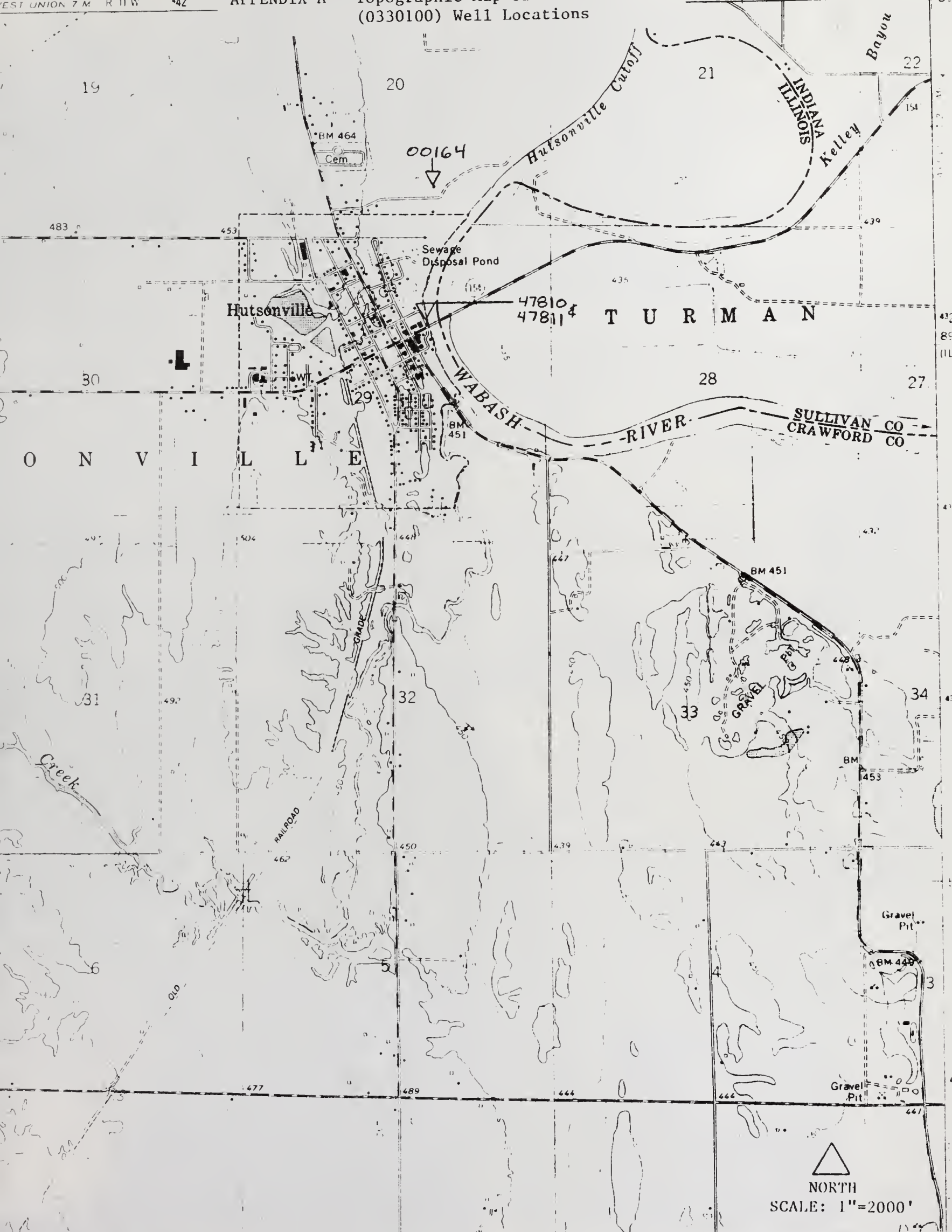


## TECHNICAL APPENDICES



APPENDIX A - Topographic Map of Huttsonville  
(0330100) Well Locations

445 700 000 FEET (ILL.) 87°37'3 39











200'

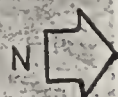
400'

1000'

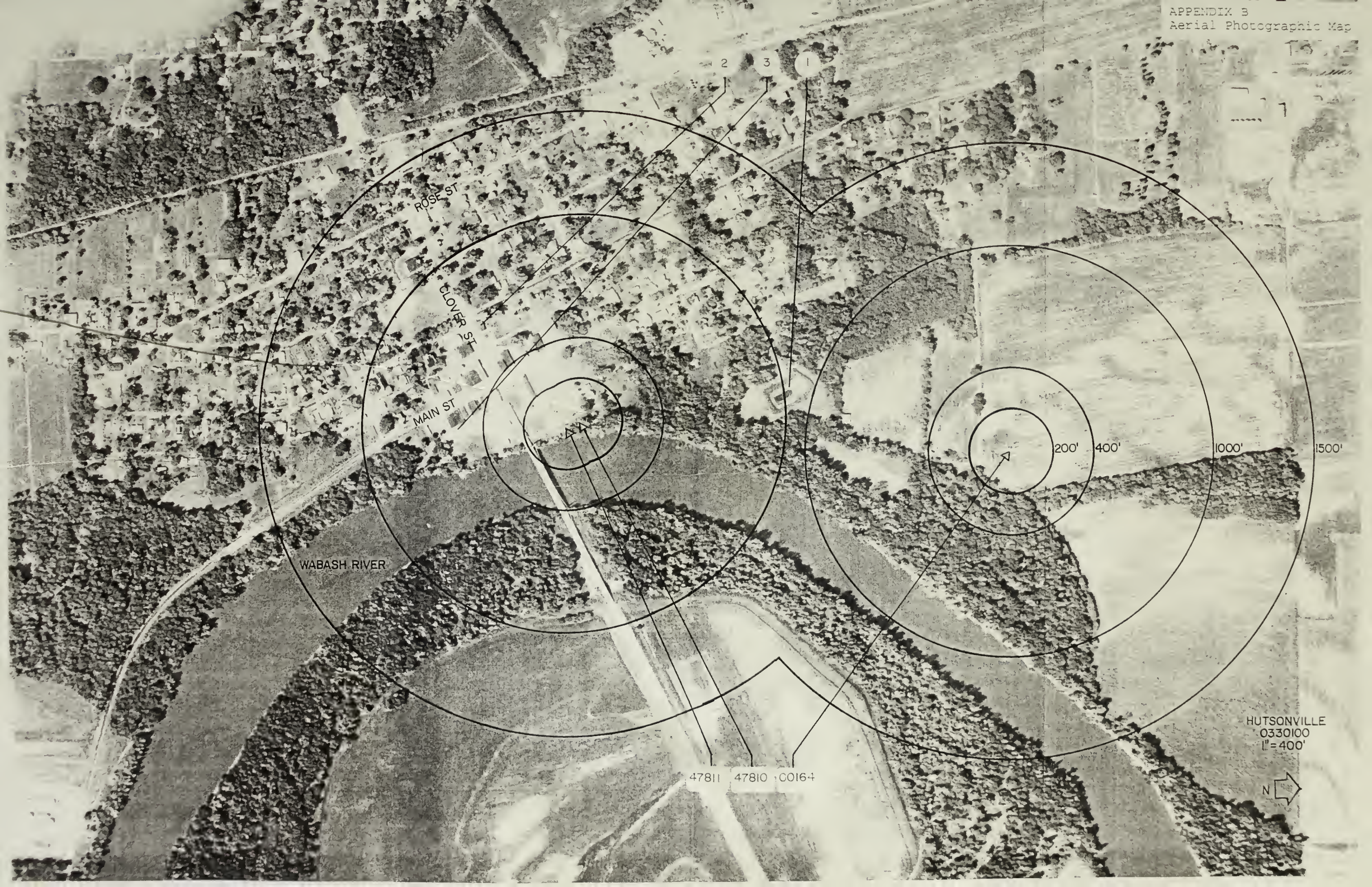
1500'

WABA

HUTSONVILLE  
0330100  
1" = 400'







WABASH RIVER

ROSE ST

CLOVER ST

MAIN ST

200'

400'

1000'

1500'

47811

47810

00164

HUTSONVILLE  
0330100  
1"=400'





Appendix B1 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE  
Hutsonville Well No. 2 (IEPA #47810)

SURVEYOR: Dulka  
SURVEY DATE: 07-24-91  
ADDRESS: Village of Hutsonville  
P.O. Box 277  
Hutsonville, IL 62433

---

AGENCY WELL NO: 47810  
WELL NAME & DESC: well #2  
TREATMENT APPLICATION POINT: 01  
FACILITY NO. & NAME: 0330100 - Hutsonville  
FACILITY PHONE CONTACT: 618-563-4307

---

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 08N, 11W, 29, 4H  
DISTANCE FROM CORNER: 625S, 2000W  
QUAD SHEET CODE & NAME: 209C - Hutsonville  
MIN. SETBACK: 400 feet  
MAX. SETBACK:

---

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: AX-Alluvium, a mixture of gravel, sand, silt and clay along streams, variable in composition and thickness.  
AGE OF WELL: 1946  
WELL DEPTH: 37 feet  
CASING DEPTH: NA  
AQUIFER CODE: 0101 - Sand & Gravel  
MULTIPLE AQUIFER (Y,N): Yes  
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting partly of commercial businesses and partly of moderate density residential housing.

---

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) Hutsonville Well No. 2  
(IEPA #47810)

\*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

---

WELL NO. - MAP CODE - CLASSF\*: 47810-01  
NAME & ADDRESS OF UNIT OWNER: Village of Hutsonville-STP, Hutsonville, IL 62433  
DESCRIPTION AND COMMENTS: Village of Hutsonville-STP  
PRE OR POST (Y,N): Yes  
DISTANCE AND DIRECTION: 900 feet north of the well

---

WELL NO. - MAP CODE - CLASSF\*: 47810-02-OS  
NAME & ADDRESS OF UNIT OWNER: Woolverton Service Station, 310 S. Clover St.,  
Hutsonville, IL 62433  
DESCRIPTION AND COMMENTS: Service station, 4 registered underground tanks OSFM #4-  
010629  
PRE OR POST (Y,N): Yes  
DISTANCE AND DIRECTION: 600 feet southwest of the well

---

WELL NO. - MAP CODE - CLASSF\*: 47810-03  
NAME & ADDRESS OF UNIT OWNER: Old Ford Garage, 108 N. Nain St., Hutsonville, Il  
62433  
DESCRIPTION AND COMMENTS: Ford Garage-closed  
PRE OR POST (Y,N): Yes  
DISTANCE AND DIRECTION: 550 feet south of the well

---



Appendix B2 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE  
Hutsonville Well No. 3 (IEPA #47811)

SURVEYOR: Dulka  
SURVEY DATE: 07-24-91  
ADDRESS: Village of Hutsonville  
P.O. Box 277  
Hutsonville, IL 62433

---

AGENCY WELL NO: 47811  
WELL NAME & DESC: well #3  
TREATMENT APPLICATION POINT: 01  
FACILITY NO. & NAME: 0330100 - Hutsonville  
FACILITY PHONE CONTACT: 618-563-4307

---

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 08N, 11W, 29, 4H  
DISTANCE FROM CORNER: 645S, 2000W  
QUAD SHEET CODE & NAME: 209C - Hutsonville  
MIN. SETBACK: 400 feet  
MAX. SETBACK:

---

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: AX-Alluvium, a mixture of gravel, sand, silt and clay along streams, variable in composition and thickness.  
AGE OF WELL: 1958  
WELL DEPTH: 32 feet  
CASING DEPTH: 28 feet  
AQUIFER CODE: 0101 - Sand & Gravel  
MULTIPLE AQUIFER (Y,N): Yes  
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting partly of commercial businesses and partly of moderate density residential housing.

---

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) Hutsonville Well No. 3  
(IEPA #47811)

\*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

---

WELL NO. - MAP CODE - CLASSF\*: 47811-01

NAME & ADDRESS OF UNIT OWNER: Village of Hutsonville-STP, Hutsonville, IL 62433

DESCRIPTION AND COMMENTS: Village of Hutsonville-STP

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 1000 feet north of the well

---

WELL NO. - MAP CODE - CLASSF\*: 47811-02-OS

NAME & ADDRESS OF UNIT OWNER: Woolverton Service Station, 310 S. Clover St.,  
Hutsonville, IL 62433

DESCRIPTION AND COMMENTS: Service station, 4 registered underground tanks OSFM #4-  
010629

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 600 feet southwest of the well

---

WELL NO. - MAP CODE - CLASSF\*: 47811-03

NAME & ADDRESS OF UNIT OWNER: Old Ford Garage, 108 N. Main St., Hutsonville, Il  
62433

DESCRIPTION AND COMMENTS: Ford Garage-closed

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 425 feet south of the well

---

APPENDIX B3 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE  
Hutsonville Well No. 4 (IEPA #00146)

SURVEYOR: Dulka  
SURVEY DATE: 07-24-91  
ADDRESS: Village of Hutsonville  
P.O. Box 277  
Hutsonville, IL 62433

---

AGENCY WELL NO: 00146  
WELL NAME & DESC: well #4  
TREATMENT APPLICATION POINT: 01  
FACILITY NO. & NAME: 0330100 - Hutsonville  
FACILITY PHONE CONTACT: 618-563-4307

---

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 08N, 12W, 20, 4B  
DISTANCE FROM CORNER: 0557N, 1855W  
QUAD SHEET CODE & NAME: 209C - Hutsonville  
MIN. SETBACK: 400 feet  
MAX. SETBACK:

---

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: AX-Alluvium, a mixture of gravel, sand, silt and clay along streams, variable in composition and thickness.  
AGE OF WELL: 1987  
WELL DEPTH: 77 feet  
CASING DEPTH: 62 feet  
AQUIFER CODE: 0101 - Sand & Gravel  
MULTIPLE AQUIFER (Y,N): Yes  
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting partly of commercial businesses and partly of moderate density residential housing.

---

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B3 - INVENTORY & SYNOPSIS OF UNIT(S) Hutsonville Well No. 4  
(IEPA #00146)

\*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

---

WELL NO. - MAP CODE - CLASSF\*: 00146-01

NAME & ADDRESS OF UNIT OWNER: Village of Hutsonville-STP, Hutsonville, IL 62433

DESCRIPTION AND COMMENTS: Village of Hutsonville-STP

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 975 feet southwest of the well

---

WELL NO. - MAP CODE - CLASSF\*: 00146-02

NAME & ADDRESS OF UNIT OWNER: Woolverton Service Station, 310 S. Clover St., Hutsonville, IL 62433

DESCRIPTION AND COMMENTS: Service station, 4 registered underground tanks OSFM #4-010629

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 2500 feet southwest of the well

---

WELL NO. - MAP CODE - CLASSF\*: 00146-03

NAME & ADDRESS OF UNIT OWNER: Old Ford Garage, 108 N. Main St., Hutsonville, IL 62433

DESCRIPTION AND COMMENTS: Ford Garage-closed

PRE OR POST (Y,N): Yes

DISTANCE AND DIRECTION: 2500 feet south of the well

---

## APPENDIX C





FACILITY: 0330100 HUTSONVILLE

OWNER: OFFICIAL CUSTODIAN

W B GRAY

PRESIDENT - VILLAGE HALL

PO BOX 277

HUTSONVILLE IL 62433

WELL: 00164 WELL#4 ON NE CORNER OF TOWN  
LATITUDE: N39 06 53.0

LONGITUDE: W087 39 22.0 STATUS: ACTIVE

TWP: 08N RNG: 12W SEC: 20 PLOT: 40  
ORILLED DEPTH(FT): 77

SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---

ALTIITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN

INTERVAL	TYPE	SCREEN MATL	DEPTH TO TOP (FT)	DEPTH TO BOT (FT)
INTERVAL 1	0 - N/A	0 - NOT APPLICABLE	0.00	0.00
INTERVAL 2	0 - N/A	0 - NOT APPLICABLE	0.00	0.00
INTERVAL 3	0 - N/A	0 - NOT APPLICABLE	0.00	0.00

WELL: 47810 WELL 2 IS NORTH WELL OF 2 N OF BRIDGE  
LATITUDE: N39 06 38.0 STATUS: INACTIVE#

LONGITUDE: W087 39 29.0 TWP: 08N RNG: 11W SEC: 29 PLOT: 4M  
ORILLED DEPTH(FT): 37

SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 400# ---

ALTIITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN

INTERVAL	TYPE	SCREEN MATL	DEPTH TO TOP (FT)	DEPTH TO BOT (FT)
INTERVAL 1	0 - N/A	0 - NOT APPLICABLE	0.00	0.00
INTERVAL 2	0 - N/A	0 - NOT APPLICABLE	0.00	0.00
INTERVAL 3	0 - N/A	0 - NOT APPLICABLE	0.00	0.00

AQUIFERS: QUATERNARY SYSTEM

WELL: 47811 WELL 3 IS SOUTH WELL OF 2 N OF BRIDGE  
LATITUDE: N39 06 38.0 STATUS: ACTIVE

LONGITUDE: W087 39 29.0 TWP: 08N RNG: 11W SEC: 29 PLOT: 4M  
ORILLED DEPTH(FT): 32

SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---

ALTIITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN

INTERVAL	TYPE	SCREEN MATL	DEPTH TO TOP (FT)	DEPTH TO BOT (FT)
INTERVAL 1	0 - N/A	0 - NOT APPLICABLE	0.00	0.00
INTERVAL 2	0 - N/A	0 - NOT APPLICABLE	0.00	0.00
INTERVAL 3	0 - N/A	0 - NOT APPLICABLE	0.00	0.00

AQUIFERS: QUATERNARY SYSTEM

SUSCEPTIBILITY CODES

LAND BURIAL: AX = ALLUVIUM, A MIXTURE OF GRAVEL, SAND, SILT, AND CLAY ALONG STREAMS, VARIABLE IN COMPOSITION AND THICKNESS.

NOTE: INACTIVE WELLS SHOULD EITHER BE RETROFITTED FOR USE OR PROPERLY ABANDONED. INACTIVE WELLS WHICH ARE IMPROPERLY ABANDONED ARE CONSIDERED POTENTIAL ROUTES ACCORDING TO P.A. 85-0863.

## APPENDIX D



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF PUBLIC WATER SUPPLIES  
SELECTED SAMPLE EXPANDED REPORT

PAGE: 13  
DATE: 06/10/93

REPORT: PMGWP048  
MODULE: PMGWM026

FACILITY: 0330100 HUTSONVILLE  
TAP: 01 PLANT AT WELL 4 ON NE CORNER OF TOWN  
RAW SRCE: 47811 WELL 3 IS SOUTH WELL OF 2 N OF BRIDGE  
STATUS: A  
PUBLIC: Y  
COMM: Y  
TYPE WATER: G

SAMPLE NO: D19501500 LOCATION: HUTSONVILLE/WELL 3  
SMPL TYPE: RAW COLLECTOR: A DULKA  
SMPL PURP: S-SPEC/OTHR COMMENTS: GW PESTICIDE  
SMPL PRDG: B-GWM PEST DISTRVATNS: 1 GAL WATER

COLL DATE: 07/24/91 DELIVERED BY: A O  
LAB RCVO: 07/25/91 RECEIVED BY: H E  
LAB COMPL: 08/30/91 LAB SUPERVISOR: JTH  
SMPL PERIOD: 07/91 FUND CODE: PW33

ANALYSIS		SLT		STREET		STANDARD		TRIGGER	
ID	NO	NO	NO	DESCRIPTION	UNITS	RESULT	DRINK WTR	RAM WTR	LEVEL
412WA00	001	39340		LINDANE UG/L	UG/L	0.010 <	4.000		
412WA00	002	39410		HEPTACHLOR UG/L	UG/L	0.010 <	0.100		
412WA00	003	39330		ALDRIN UG/L	UG/L	0.010 <	1.000		
412WA00	004	39420		HEPTACHLOR EPOXIDE UG/L	UG/L	0.010 <	0.100		
412WA00	005	39348		ALPHA CHLORDANE UG/L	UG/L	0.010 <			
412WA00	006	39810		GAMMA CHLORDANE UG/L	UG/L	0.010 <			
412WA00	007	39380		DIELDRIN UG/L	UG/L	0.010 <	1.000		
412WA00	009	39370		ENDRIN UG/L	UG/L	0.010 <	0.200		
412WA00	009	39480		METHOXYCHLOR UG/L	UG/L	0.050 <	100.000		
412WA00	010	39327		O,P'-DDE UG/L	UG/L	0.010 <			
412WA00	011	39320		P,P'-DDE UG/L	UG/L	0.010 <			
412WA00	012	39315		O,P'-DDD UG/L	UG/L	0.010 <			
412WA00	013	39310		P,P'-DDD UG/L	UG/L	0.010 <			
412WA00	014	39305		O,P'-DDT UG/L	UG/L	0.010 <			
412WA00	015	39300		P,P'-DDT UG/L	UG/L	0.010 <			
412WA00		39370		TOTAL DDT UG/L	UG/L	0.000	50.000		
412WP00	001	39516		TOTAL PCB'S UG/L	UG/L	0.100 <			
412WT00	001	39400		TOXAPHENE UG/L	UG/L	1.000 <	5.000		
418WM00	001	39730		2,4-D UG/L	UG/L	0.100 <	10.000		
418WM00	002	39760		SILVEX UG/L	UG/L	0.050 <	10.000		
418WM00	001	46313		PHORATE UG/L	UG/L	0.050 <			
418WM00	002	39570		DIAZINON UG/L	UG/L	0.050 <			
418WM00	003	39357		RONNEL UG/L	UG/L	0.050 <			
418WM00	004	39630		METHYL PARATHION UG/L	UG/L	0.050 <			
418WM00	005	82088		TERBUTHOS (COUNTER) UG/L	UG/L	0.050 <			
418WM00	006	81294		DFUNATE UG/L	UG/L	0.050 <			
418WM00	007	81403		DURSABAN UG/L	UG/L	0.050 <			
418WM00	008	39530		MALATHION UG/L	UG/L	0.050 <			
418WM00	009	39398		ETHION UG/L	UG/L	0.050 <			
418WM00	010	81284		TREFLAN UG/L	UG/L	0.010 <			
418WM00	011	39630		ATRAZINE (AATREX) UG/L	UG/L	0.050 <			
418WM00	012	77825		ALACHLOR UG/L	UG/L	0.020 <			
418WM00	013	39356		METOLACHLOR (DUAL) UG/L	UG/L	0.100 <			
418WM00	014	81757		CYANAZINE UG/L	UG/L	0.100			
5001200	001	72037		PUMPING RATE GPM	GAL/M	175.000			
5001200	002	00034		CONDUCTIVITY - FIELO (UMHOS/CM @ 25 C)	UM/CM	653.000			
5001200	003	00090		OXIDATION-REDUCTION POTENTIAL (EM) MILLIVOLTS	MV	161.000			
5001200	004	00430		PH PH UNITS	UNITS	6.800			
5001200	005	00010		WATER TEMPERATURE DEG C	DEG.C	13.430			

SAMPLE NO: B11034600 LOCATION: HUTSONVILLE  
COLL DATE: 07/24/91 DELIVERED BY: UPS



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF PUBLIC WATER SUPPLIES  
SELECTED SAMPLE EXPANDED REPORT

REPORT: PWGWP048  
MODULE: PWGWM026

PAGE: 14  
DATE: 06/10/93

FACILITY: 0330100 HUTSONVILLE										*** CONTINUED ***									
SMPL TYPE: RAW COLLECTOR: A DULKA										LAB RCVD: 07/26/91 RECEIVED BY: PMO									
SMPL PURP: S-SPEC/OTHR COMMENTS:										LAB COMPL: 10/16/91 LAB SUPERVISOR: RPF									
SMPL PROG: I-GWM INORG OBSRVATNS:										SMPL PERIOD: 07/91 FUND CODE: PW33									
ANALYSIS RSLT -----STORET-----										-----STANDARDS-----									
ID	NO	NO	DESCRIPTION	UNITS	RESULT	ORINK	WTR	RAW	WTR	TRIGGER	LEVEL								
102T000	001	70300	RESIDUE, TOTAL FILTERABLE @180 C, MG/L	MG/L	402.000														
103T000	001	00410	ALKALINITY, TOTAL MG/L AS CaCO3	MG/L	279.000														
107T000	001	00951	FLUORIDE, TOTAL MG/L AS F	MG/L	0.150						4.000								
108T000	001	00940	CHLORIDE, TOTAL MG/L AS CL	MG/L	11.000														
109T000	001	00945	SULFATE, TOTAL MG/L AS SO4	MG/L	70.000														
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	2.900						10.000								
111T000	001	00610	NITROGEN, AMMONIA TOTAL MG/L AS N	MG/L	0.020														
112T000	001	32730	PHENOLS, TOTAL RECOVERABLE UG/L	UG/L	25.000														
114T000	001	00956	SILICA, TOTAL MG/L AS SiO2	MG/L	13.400														
115T000	001	00665	PHOSPHORUS, TOTAL MG/L AS P	MG/L	0.030														
116T000	001	00720	CYANIDE, TOTAL MG/L AS CN	MG/L	0.005						0.200								
144T000	001	01002	ARSENIC, TOTAL RECOVERABLE UG/L AS AS	UG/L	1.000						50.000								
151T100	001	01051	LEAD, TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000						50.000								
153T000	001	71900	MERCURY, TOTAL UG/L AS HG	UG/L	0.050						2.000								
155T000	001	01147	SELENIUM, TOTAL RECOVERABLE UG/L AS SE	UG/L	1.000						10.000								
177T100	001	00916	CALCIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	102.000														
177T100	002	00927	MAGNESIUM, TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	21.000														
177T100	003	00929	SODIUM, TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	8.500														
177T100	004	00937	POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	5.300														
177T100	005	01105	ALUMINUM, TOTAL RECOVERABLE UG/L AS AL ANAL BY ICP	UG/L	150.000														
177T100	006	01027	BARIUM, TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	44.000						1000.000								
177T100	007	01022	BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	88.000														
177T100	008	01012	BERYLLIUM, TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	1.000														
177T100	009	01027	CADMIUM, TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP	UG/L	5.000						10.000								
177T100	010	01034	CHROMIUM, TOTAL RECOVERABLE UG/L AS CR ANAL BY ICP	UG/L	5.000						50.000								
177T100	011	01042	COPPER, TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	10.000						5000.000								
177T100	012	01037	CORAL, TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000														
177T100	013	01045	IRON, TOTAL RECOVERABLE, UG/L AS FE ANAL BY ICP	UG/L	60.000						1000.000								
177T100	014	01055	MANGANESE, TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	15.000						150.000								
177T100	015	01067	NICKEL, TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	15.000														
177T100	016	01077	SILVER, TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	5.000						50.000								
177T100	017	01082	STRONTIUM, TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	170.000														
177T100	018	01087	VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP	UG/L	5.000														
177T100	019	01092	ZINC, TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000						5000.000								
177T100	020	82394	HARDNESS, CALC - MG/L	MG/L	341.000														
5001200	001	72037	PUMPING RATE GPM	GAL/M	175.000														
5001200	002	00094	CONDUCTIVITY - FIELD (UMHOS/CM @ 25 C)	UM/CM	653.000														
5001200	003	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	MV	161.000														
5001200	004	00400	PH PH UNITS	UNITS	6.800														
5001200	005	00010	WATER TEMPERATURE DEG C	DEG-C	13.430														

SAMPLE NO: H050386 LOCATION: WELL #3  
SMPL TYPE: RAW COLLECTOR: W D CULIPAN

COLL DATE: 04/16/81 DELIVERED BY:  
LAB RCVD: 05/14/81 RECEIVED BY:



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF PUBLIC WATER SUPPLIES  
SELECTED SAMPLE EXPANDED REPORT

REPORT: PWGWP048  
MODULE: PWGWM026

PAGE: 15  
DATE: 06/10/93

FACILITY: 0330100 HUTSONSVILLE

\*\*\* CONTINUED \*\*\*

SMPLE PURP: 1-ROUTINE COMMENTS:  
SMPLE PROG: I-GWM INORG 09SRVATNS:

LAB COMPL: LAB SUPERVISOR:  
SMPLE PERIOD: 04/81 FUND CODE:

ANALYSIS		RSLT	STORE		DESCRIPTION		UNITS	RESULT	STANDARDS			TRIGGER
IO	NO	NO	NO	NO	DESCRIPTION		UNITS	RESULT	DRINK MTR	RAW MTR	LEVEL	LEVEL
00095	CONDUCTIVITY(=C)-LAD(CUMHOS/CM @ 25 C							810.000				
00403	PH LABORATORY UNITS							7.200				
00410	ALKALINITY, TOTAL MG/L AS CaCO3							307.000				
00610	NITROGEN, AMMONIA TOTAL MG/L AS N							0.600				
00630	NITRATE & NITRITE TOTAL MG/L AS N							0.800			10.000	
00720	CYANIDE, TOTAL MG/L AS CN							0.005 <			0.200	
00900	HARDNESS, EDTA MG/L AS CaCO3							362.000				
00916	CALCIUM, TOTAL RECOVERABLE MG/L AS Ca ANAL BY ICP							108.000				
00927	MAGNESIUM, TOTAL RECOVERABLE MG/L AS Ca ANAL BY ICP							24.500				
00929	SODIUM, TOTAL RECOVERABLE MG/L AS Na ANAL BY ICP							25.000				
00937	POTASSIUM, TOTAL RECOVERABLE MG/L AS K ANAL BY ICP							5.600				
00940	CHLORIDE, TOTAL MG/L AS CL							41.000				
00945	SULFATE, TOTAL MG/L AS SO4							57.000				
00951	FLUORIDE, TOTAL MG/L AS F							0.120			4.000	
00956	SILICA, TOTAL MG/L AS SiO2							12.000				
01002	ARSENIC, TOTAL RECOVERABLE UG/L AS AS							1.000 <			50.000	
01007	BARIUM, TOTAL RECOVERABLE UG/L AS Ba ANAL BY ICP							57.000			1000.000	
01012	BERYLLIUM, TOTAL RECOVERABLE UG/L AS Be ANAL BY ICP							0.500 <				
01022	BORON, TOTAL RECOVERABLE UG/L AS B ANAL BY ICP							290.000				
01027	CADMIUM, TOTAL RECOVERABLE UG/L AS Cd ANAL BY ICP							3.000 <			10.000	
01034	CHROMIUM, TOTAL RECOVERABLE UG/L AS Cr ANAL BY ICP							5.000 <			50.000	
01037	COSALT, TOTAL RECOVERABLE UG/L AS Co ANAL BY ICP							5.000 <				
01042	COPPER, TOTAL RECOVERABLE UG/L AS Cu ANAL BY ICP							3.000 <			5000.000	
01043	IRON, TOTAL RECOVERABLE UG/L AS Fe ANAL BY ICP							28.000			1000.000	
01051	LEAD, TOTAL RECOVERABLE UG/L AS Pb							5.000 <			50.000	
01055	MANGANESE, TOTAL RECOVERABLE UG/L AS Mn ANAL BY ICP							249.000			150.000*	
01067	NICKEL, TOTAL RECOVERABLE UG/L AS Ni ANAL BY ICP							3.000 <				
01077	SILVER, TOTAL RECOVERABLE UG/L AS Ag ANAL BY ICP							5.000 <			50.000	
01082	STRONTIUM, TOTAL RECOVERABLE UG/L AS Sr ANAL BY ICP							235.000				
01087	VANADIUM, TOTAL RECOVERABLE UG/L AS V ANAL BY ICP							4.000 <				
01092	ZINC, TOTAL RECOVERABLE UG/L AS Zn ANAL BY ICP							14.000			5000.000	
01147	SELENIUM, TOTAL RECOVERABLE UG/L AS Se							5.000 <			10.000	
70300	RESIDUE, TOTAL FILTERABLE @180 C, MG/L							487.000				
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC							490.000				
71900	MERCURY, TOTAL UG/L AS Hg							0.200 <			2.000	

SAMPLE NO: 019501700 LOCATION: HUTSONSVILLE/WELL 3  
SMPLE TYPE: RAW COLLECTOR: A DULKA  
SMPLE PURP: 5-SPEC/OTHR COMMENTS: GW VOC/VOC  
SMPLE PROG: V-VOC OBSRVATNS: 2 VOC

COLL DATE: 07/24/91 DELIVERED BY: A D  
LAB RCVD: 07/25/91 RECEIVED BY: M E  
LAB COMPL: 07/29/91 LAB SUPERVISOR: JTM  
SMPLE PERIOD: 07/91 FUND CODE: PM33



FACILITY: 0330100 HUTSONVILLE									
*** CONTINUED ***									
ANALYSIS		RSLT	STREET		STANDARD		RAW		TRIGGER
ID	NO	NO	DESCRIPTION	NO	DESCRIPTION	ORINK	WTR	WTR	LEVEL
431W800	001	32106	CHLOROFORM UG/L GC/MS			UG/L		0.500	<
431W800	002	32101	BROMODICHLOROMETHANE UG/L GC/MS			UG/L		0.500	<
431W800	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS			UG/L		0.500	<
431W800	004	32104	BROMOFORM UG/L GC/MS			UG/L		0.500	<
431W800	005	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS			UG/L		200.000	
431W800	006	34511	1,1,2-TRICHLOROETHANE UG/L GC/MS			UG/L		5.000	
431W800	007	34501	1,1-DICHLOROETHYLENE UG/L GC/MS			UG/L		0.500	<
431W800	008	34551	1,2,4-TRICHLOROBENZENE UG/L GC/MS			UG/L		9.000	
431W800	009	34536	1,2-DICHLOROBENZENE UG/L GC/MS			UG/L		600.000	
431W800	010	32103	1,2-DICHLOROETHANE UG/L GC/MS			UG/L		0.500	<
431W800	011	34541	1,2-DICHLOROPROPANE UG/L GC/MS			UG/L		5.000	
431W800	012	34571	PARA-DICHLOROBENZENE UG/L GC/MS			UG/L		75.000	
431W800	013	34030	BENZENE UG/L GC/MS			UG/L		5.000	
431W800	014	32102	CARBON TETRACHLORIDE UG/L GC/MS			UG/L		5.000	
431W800	015	34301	CHLOROBENZENE UG/L GC/MS			UG/L		100.000	
431W800	016	77093	CIS-1,2-DICHLOROETHYLENE UG/L GC/MS			UG/L		0.500	<
431W800	017	34371	ETHYLBENZENE UG/L GC/MS			UG/L		700.000	
431W800	018	34423	METHYLENE CHLORIDE UG/L GC/MS			UG/L		5.000	
431W800	019	77128	STYRENE UG/L GC/MS			UG/L		100.000	
431W800	020	34475	TETRACHLOROETHYLENE UG/L GC/MS			UG/L		0.500	<
431W800	021	34010	TOLUENE UG/L GC/MS			UG/L		1000.000	
431W800	022	81551	XYLENE UG/L GC/MS			UG/L		10000.000	
431W800	023	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS			UG/L		0.500	<
431W800	024	39180	TRICHLOROETHYLENE UG/L GC/MS			UG/L		0.500	<
431W800	025	39175	VINYL CHLORIDE UG/L GC/MS			UG/L		0.500	<
431W800	026	77562	1,1,1,2-TETRACHLOROETHANE UG/L GC/MS			UG/L		0.500	<
431W800	027	34516	1,1,2,2-TETRACHLOROETHANE UG/L GC/MS			UG/L		0.500	<
431W800	028	34496	1,1-DICHLOROETHANE UG/L GC/MS			UG/L		0.500	<
431W800	029	77168	1,1-DICHLOROPROPENE UG/L GC/MS			UG/L		0.500	<
431W800	030	77443	1,2,3-TRICHLOROPROPANE UG/L GC/MS			UG/L		0.500	<
431W800	031	34566	M-DICHLOROBENZENE UG/L GC/MS			UG/L		0.500	<
431W800	032	77173	1,3-DICHLOROPROPANE UG/L GC/MS			UG/L		0.500	<
431W800	033	77170	2,2-DICHLOROPROPANE UG/L GC/MS			UG/L		0.500	<
431W800	034	81555	BROMOBENZENE UG/L GC/MS			UG/L		0.500	<
431W800	035	34413	BROMOMETHANE UG/L GC/MS			UG/L		0.500	<
431W800	036	34311	CHLOROETHANE UG/L GC/MS			UG/L		0.500	<
431W800	037	34418	CHLOROMETHANE UG/L GC/MS			UG/L		0.500	<
431W800	038	34704	CIS-1,3-DICHLOROPROPYLENE UG/L GC/MS			UG/L		0.500	<
431W800	039	81522	DIBROMOMETHANE UG/L GC/MS			UG/L		0.500	<
431W800	040	77970	TOTAL CHLOROTOLUENES, UG/L GC/MS			UG/L		0.500	<
431W800	041	34699	TRANS-1,3-DICHLOROPROPYLENE UG/L GC/MS			UG/L		0.500	<
5001200	001	72037	PUMPING RATE GPM			GAL/M		175.000	
5001200	002	00094	CONDUCTIVITY - FIELD (UMHOS/CM @ 25 C)			UM/CM		653.000	
5001200	003	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS			MV		161.000	
5001200	004	00430	PH			UNITS		6-800	
5001200	005	00010	WATER TEMPERATURE DEG C			DEG.C		13.430	

## APPENDIX E



47811  
1/4" unconfined steel plate  
inches, material  
properties available

47811

47811  
1/4" unconfined Steel Plate  
inches, material  
properties available

properties available

18. Did you seal bottom of well? Yes . Thickness

19. Was well under ramped? *No* From

50's/60's

From \_\_\_\_\_ feet to \_\_\_\_\_ feet.

From foot to foot,

From feet to feet.

99

20 If all person was not placed at bottom, state how it was apportioned.

[illegible]

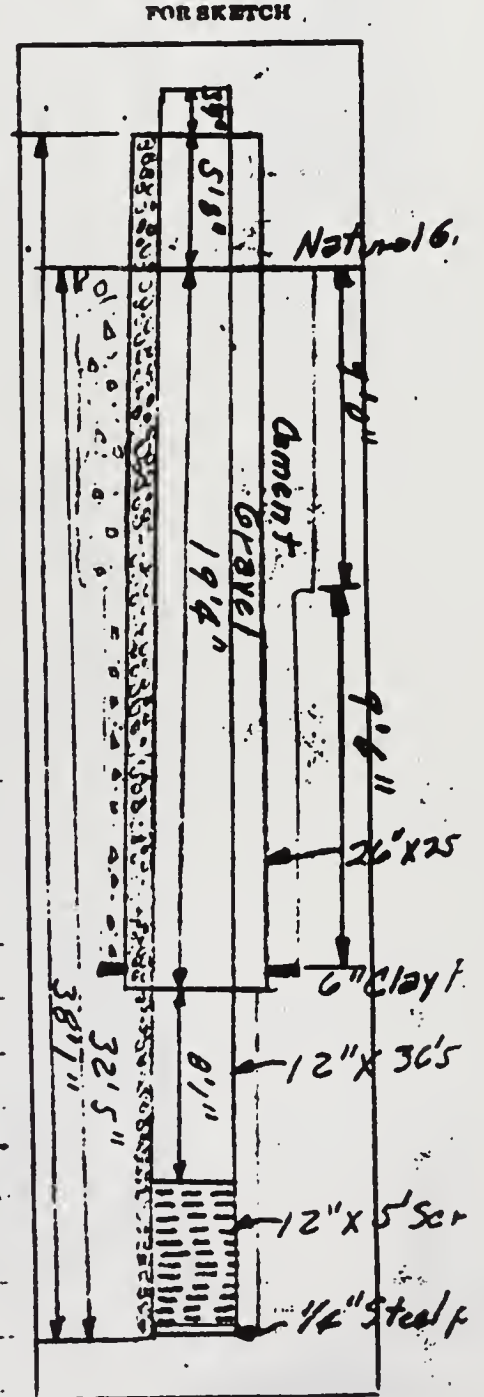
21. Depth of well (from ground level to top of plug) 32 feet 5 inches.

22. Was cement placed around or between any of the casings? Yes.

23. If so, state where, how much and method used. Tremy Pipe 3" Dia. From 26" Cas.  
to 38" drilled hole 10' From 26" to 42" drilled hole 9'

6" Clay seal below cement Total Cement used 4.5 cu yd

24. Log of well from ground level: 0330100 - 47811

[illegible]

25. Remarks:





White Copy -  
Ill. Dept. of Public Health  
Yellow Copy - Well Contractor  
Blue Copy - Well Owner

## ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

### 1. Type of Well

- a. Dig ☐ Bored ☒ Hole Diam.          in. Depth          ft.  
Curb material          Buried Slab: Yes ☐ No ☐  
b. Driven ☐ Drive Pipe Diam.          in. Depth          ft.  
c. Drilled 24 Finished in Drift ☒ In Rock           
Tubular          Gravel Packed           
d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Cement	20	Surface

### 2. Distance to Nearest:

Building 900 Ft. Seepage Tile Field None Known  
Cess Pool 900 Sewer (non Cast iron) None Known  
Privy 900 Sewer (Cast iron) None Known  
Septic Tank 900 Barnyard 900  
Leaching Pit 900 Manure Pile 900

3. Well furnishes water for human consumption? Yes ☒ No ☐

4. Date well completed 6/24/87

5. Permanent Pump Installed? Yes ☒ Date 6/24/87 No 106621

Manufacturer Layne & Bowler V.T.P. Location Well #4

Capacity 300 gpm. Depth of Setting 50 Type Grout Ft.

6. Well Top Sealed? Yes ☒ No ☐ Type Grout

7. Pitless Adapter Installed? Yes ☐ No ☒

Manufacturer          Model Number         

How attached to casing?         

8. Well Disinfected? Yes ☒ No ☐

9. Pump and Equipment Disinfected? Yes ☒ No ☐

10. Pressure Tank Size None gal. Type         

Location         

11. Water Sample Submitted? Yes ☒ No ☐

### REMARKS:

INDICATORS IN CIRCLES

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

## GEOLOGICAL AND WATER SURVEY WELL RECORD

10. Property owner City of Hutsonville Well No. 4

Address City Hall, Hutsonville, IL 62433

Driller Layne-Western Co., Inc. License No. 102-003092

11. Permit No. 13227 Date         

12. Water from Artificial 13. County Crawford

at depth 76.6 to 61 ft. Sec. 20

14. Screen: Diam. 10 in. Twp. 8N

Length: 15 ft. Slot .080" Rge. 11W

Elev.         

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
10"	Steel 40.48 #/ft.	61	+5'

THICKNESS	DEPTH OF BOTTOM
5	5
25	30
30	73

16. Size Hole below casing: 24 in.

17. Static level 245 ft. below casing top which is 5 ft.

above ground level. Pumping level 35 ft. when pumping at 400

gpm for 5 hours.

18. FORMATIONS PASSED THROUGH

Fine Dark Brown Sand

Fine to Medium Sand

Fine to Medium Sand and Gravel

SIGNED

Steve Petersen

Steven R. Petersen

DATE

10/29/87

(CONTINUE ON SEPARATE SHEET IF NECESSARY)













UNIVERSITY OF ILLINOIS-URBANA



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